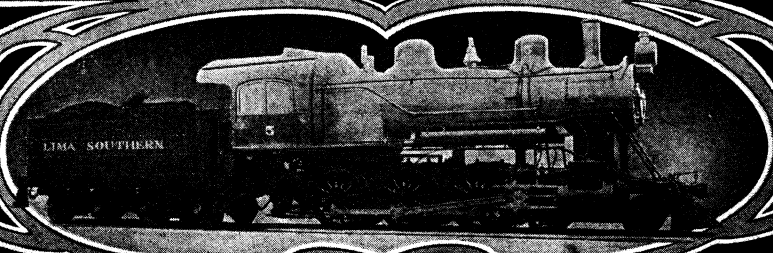
AUGUST, 1910

THE LOCOMOTIVE WORLD

LOGGING · MINING · INDUSTRIAL & STANDARD RAILROAD · PLANTATION · MOTIVE POWER

36 TON SHAY LOCOMOTIVE IN USE BY THE SLATE RUN R.R.Co SLATE RUN, PA.



VOLUME 3 AUGUST 1910 NUMBER 4

THE LOCOMOTIVE WORLD.

PUBLISHED MONTHLY BY

THE FRANKLIN TYPE AND PRINTING COMPANY

H. C. HAMMACK, EDITOR.

210 N. ELIZABETH ST., LIMA, OHIO.

Devoted to the interests of private users of Locomotives and Equipment for Logging, Mining, Plantations and Industrial Railroads.

SUBSCRIPTION RATES.

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Foreign.....75c a year

NOTICE TO ADVERTISERS.

Advertising rates furnished upon application. Changes in advertisements intended for a particular issue should reach the office of The Locomotive World not later than the 20th of the month prior to the date of issue. New advertisements requiring no proof can be received up to the 1st of the month of date of issue.

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USE OF THE BALD DRIVING WHEEL.

TIRE GRADUALLY DISAPPEARING.

A good many years ago it was thought to be an absolute necessity for the middle driver on Mogul and Tenwheel Locomotives and second and third pair of wheels of the Consolidation type to have bald or plain tires. About 1899 there was a great difference of opinion among the well informed railroad men about the necessity of omitting the flanges on the drivers mentioned and along about that time many of the roads began the use of all flange tires and making an allowance for a little more end play on the journals. One of the chief reasons for the abandonment of the use of the plain tire was to avoid the expense and trouble incident to carrying plain tires of several sizes in stock. This was a very good reason, and one which was well worth much consideration, as for a road having a number of engines it meant a considerable sum tied up in these particular tires, where if all tires were flanged a less stock would take care of all the requirements. Today the use of the bald tire on locomotives for the trunk line railroads is almost a thing of the past, and instead of making allowance for a little more end play in journals they overcome the grinding of the flanges on curves by setting in the middle tires on Mogul, Tenwheel, Sixwheel Switchers about $\frac{3}{16}$ of an inch closer than the front and back drivers. This same practice is followed on the second and third pair of drivers on Consolidation. This feature may not be found to be a great advantage to private users who only have one or two engines in service, yet where a number of engines are employed it will be a great point, especially where a user has several engines of the same diameter and width flange drivers.

This is only one of the many little things that The Locomotive World is looking out for in behalf of the private users. If you are employing a similar method of economy in your operations which is not generally used by private users tell others through these columns.

HOW TO REMOVE AND SET LOCOMOTIVE TIRES WITHOUT SHOP FACILITIES.

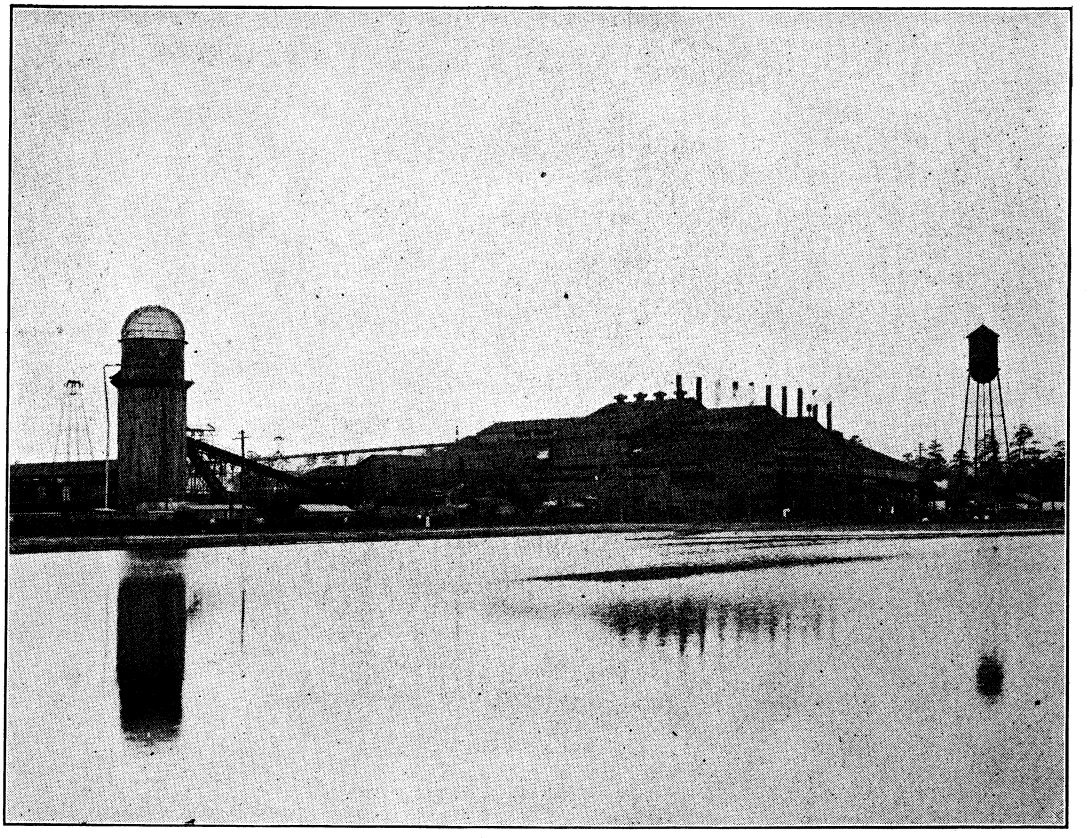
One of the difficulties which frequently confronts the locomotive engineer on private railway lines is the best method of removing and setting of locomotive tires. It is a very easy task when all facilities are provided such as will be found in our modern railroad shops and to which the engineer may have access, yet there are a great many private lines where these tools and conveniences are not to be found and the shop appliances are limited; this is the case in most logging, mining, and plantation plants.

There are different ways in which this work can be accomplished but we will only endeavor to explain a method which can be followed with good results. Where there are no shop facilities accessable the first problem which it is necessary for the engineer to overcome is how to remove the wheels from under the engine; on either the direct connected locomotive or the Geared. Locomotive this can be accomplished by blocking up first one end of the locomotive by means of jack screws, railroad ties or any other block that may be handy and then after the trucks or wheels are removed block up the other end of the locomotive in the same manner. When the locomotive is raised on the block it is a very easy matter to remove the trucks or wheels as the case may be. As soon as the wheels are out from under the locomotive and you have no small cranes by which you can handle them a tripod can be made by using three pieces of timber chained together at the top; you can then attach to the top of this tripod the block and fall with which the wheels on axle may be raised to an upright position, say six or eight inches off ground. When this has been done block up under wheel center with iron, stone or brick so that the tripod may be removed and the wheels left standing perfectly rigid in this upright position, care being taken that the blocks used do not extend over the tire for in case they should you would experience difficulty in removing the tire when it is properly heated. After this has been done cover the entire wheel center with mud in such a manner that water may be applied during the operation of heating the tire in order to keep the center as cool as possible. Arrange the mud on the center so that the water will drain towards the center and run away from the opening near the axle without coming in contact with the tire. You should then build a quick, hot fire around the outer edge and in a short time the tire will expand sufficiently so that by using a sledge and striking evenly around the rim of the tire it will begin to slip and may be removed with little or no trouble at all. Great care must be exercised in keeping the mud damp during the operation of heating the tire as it is very essential to keep the wheel center cool, otherwise you may experience more or less trouble with the wheel center cracking, etc. In case you do not want to preserve the tire or remove it whole so that it may be turned and refitted again and simply want to throw the tires which are removed, in the scrap, and you have a drill press in your blacksmith shop, which is usually the case around all plants, the best method is to drive a line of holes arcoss the tire and then drive in a wedge which will either spread or split the same, permitting its removal.

In setting new tires after the old ones have been removed you can use the same apparatus for handling the wheel center on axle as was used in raising the wheels on axles upright. Pile the tires one on top of the other, with the flange on the lower side at the same time leaving an open space at the bottom of the pile, say about the same distance that you left on heating the one tire to remove it, about six or eight inches to act as a draft. After you have done this build a wood fire inside and make it a quick, hot fire as possible; then after the tires are hot, not red hot however, and have expanded use tripod, block and fall again lifting the tire over the wheel center and let it settle down to place. In case the tire should stick a slight blow from a hammer or sledge will make it go to its proper place. Then throw water over it when it will quickly shrink to its natural size. Great care should be taken in having the outside of the wheel center and the inside of the tire clean and free from all dirt and ashes. When ready to place the tire in case you should desire to handle the wheel centers on axles with the tripod instead of the tire, the tires should be piled with the flanges up and then after the wheels center has been dropped to place it should be allowed to stand a short time to cool the tire so that it will not slip off when raised to reverse the wheels.

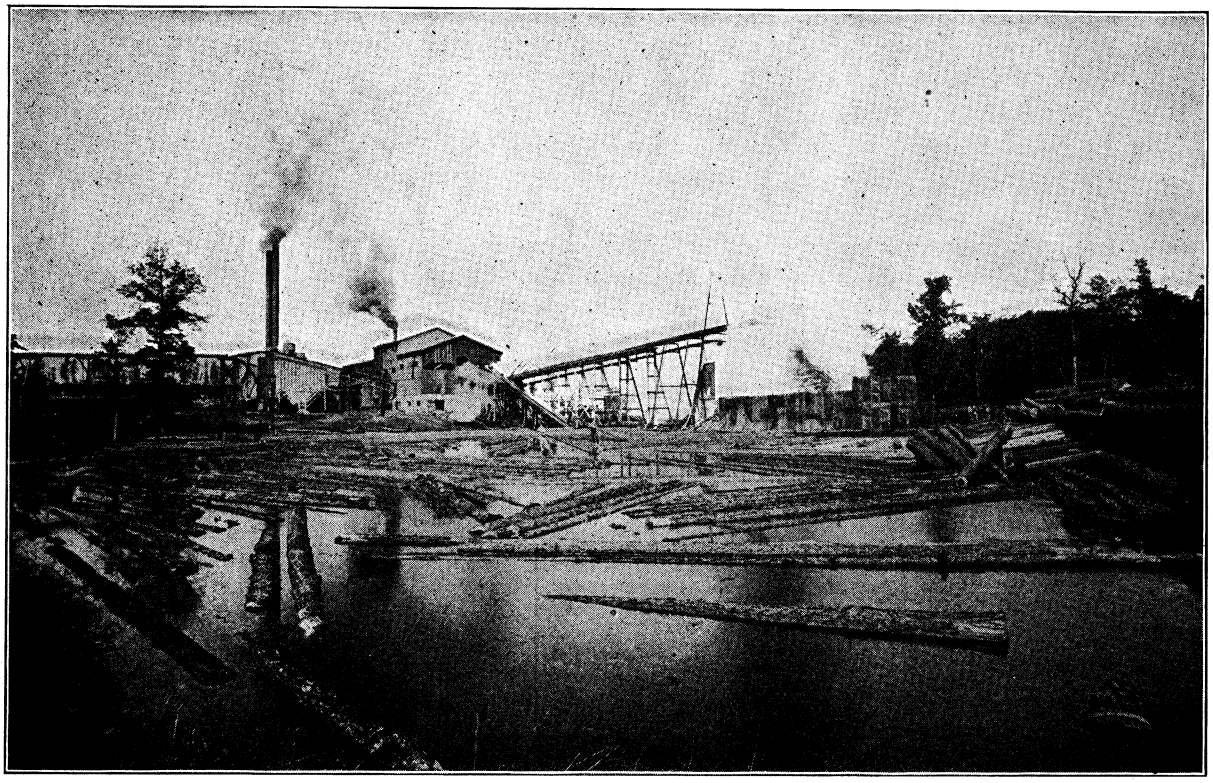
Thirty Years Ago As Compared With Today

IT seems but a few years ago when the circular saw was all the rage with the lumbermen, and the logging was all done by oxen or teams, hauling on sleds in the winter and on wagons in the summer. However, thirty years ago marks the epoch when the primitive method of logging was given up for a more up-to-date way. This was when the locomotive and tramway was suggested to take the place of the oxen, horses, sleds and wagons. The circular saw held its own longer and was not displaced by our modern band saw until along about 1890. The last thirty years has marked a great improvement in the manufacture of lumber in all its phases, and while we today consider that there could hardly be any further improvement, there is no question but what in the next thirty years to come there will be great changes which will enable the lumbermen to cut the cost of production today nearly in two.

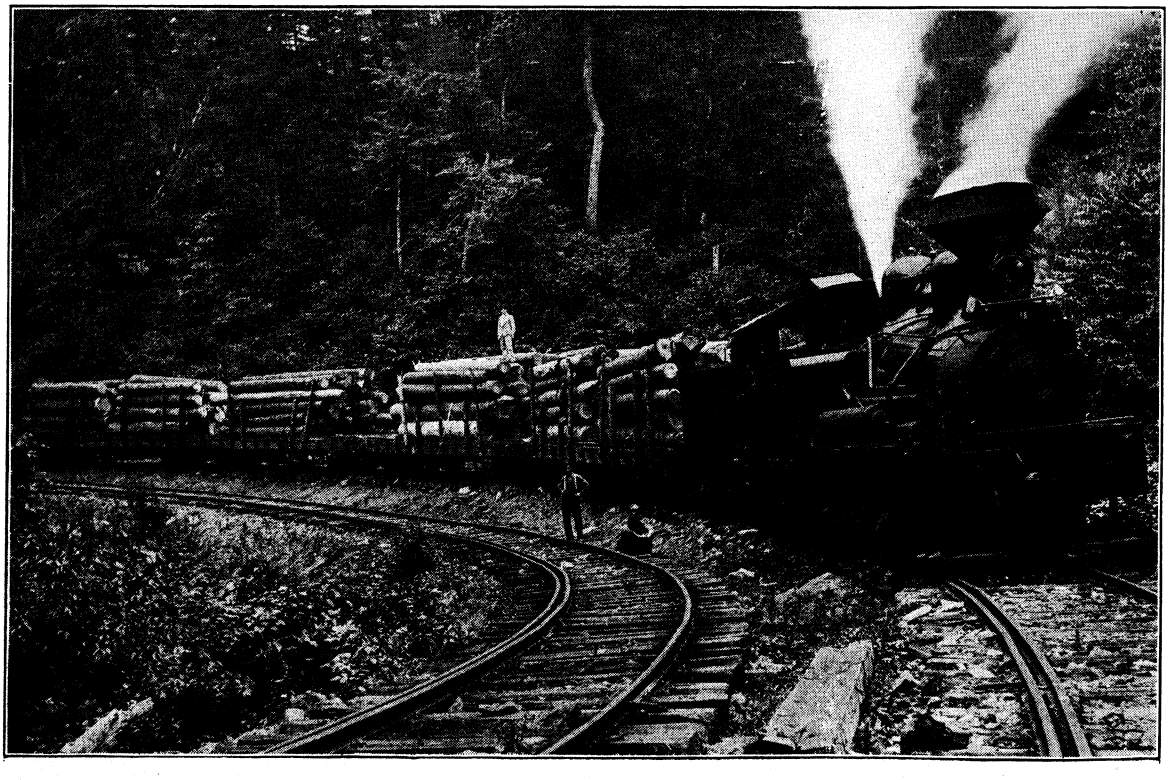


NEW MODERN SAW MILL OF THE GREAT SOUTHERN LUMBER CO., AT BOGALUSA, SHOWING MILL POND IN FOREGROUND. LATH MILL AT LEFT.

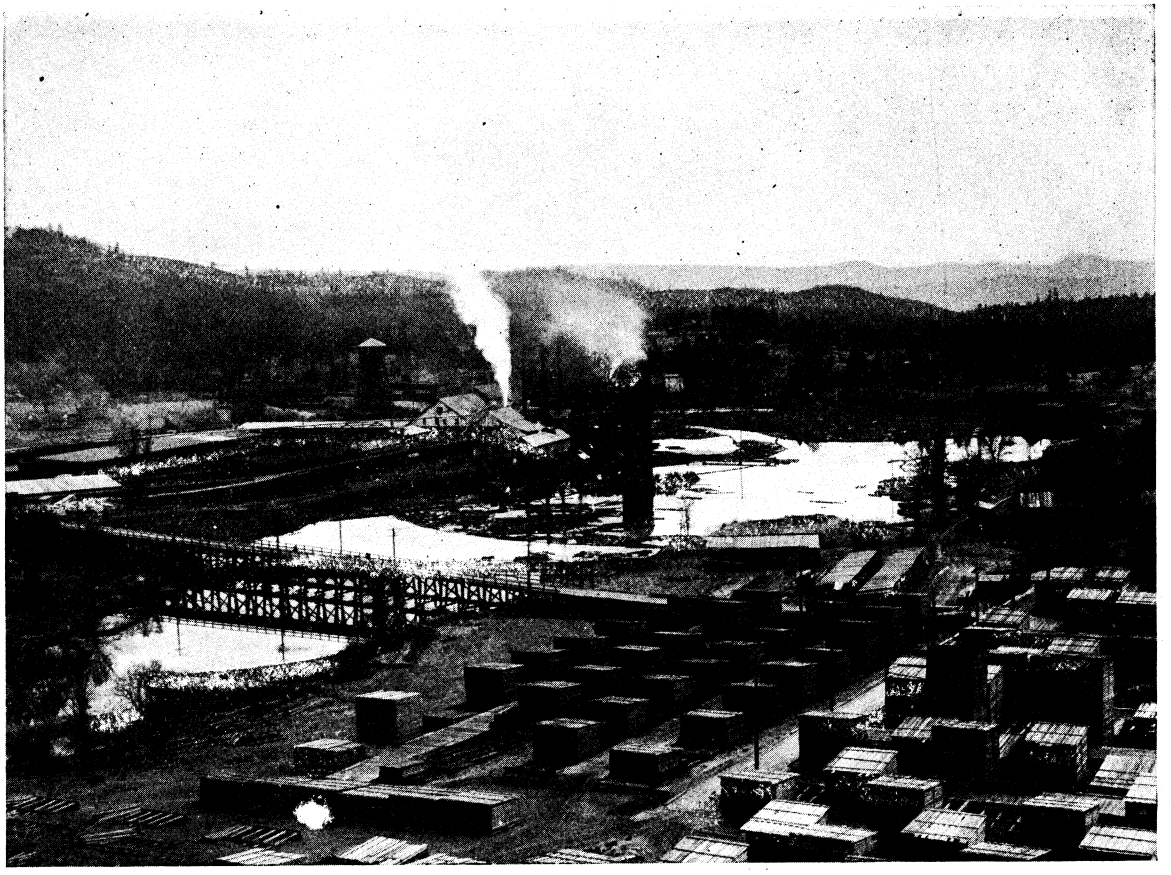
To illustrate what has taken place in the last thirty years in the method of transportation of logs from the woods to the mill, we show a cut of one of the first logging locomotives on a logging tram road. This locomotive was called a "Shay Patent" locomotive, after the name of a lumberman in Northern Michigan who originated the same. Today, the locomotive which still retains the name of the patentee, "Shay," is as much different as day and night. So it is with all the machinery used in lumbering and logging operations. Picture in your mind, if you please, one of the old style saw mill plants with the old circular saw housed in a shed having clapboard sides and roof, with some of the modern saw mill plants of today which we illustrate herein, and note the great advance. Take the band saw which displaced the circular saw, many marked improvements were made even within the last twelve years. These improvements all lead to economy in



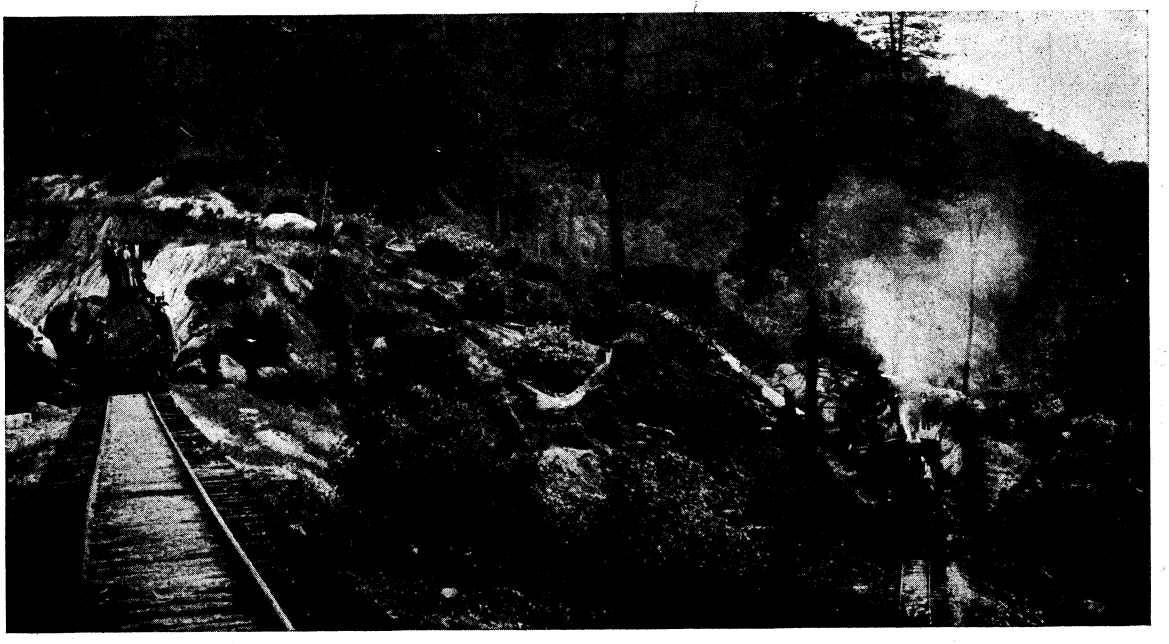
SAW MILL AND LOG POND, ALEX'R GILMER LUMBER COMPANY, REMLIG, TEXAS.



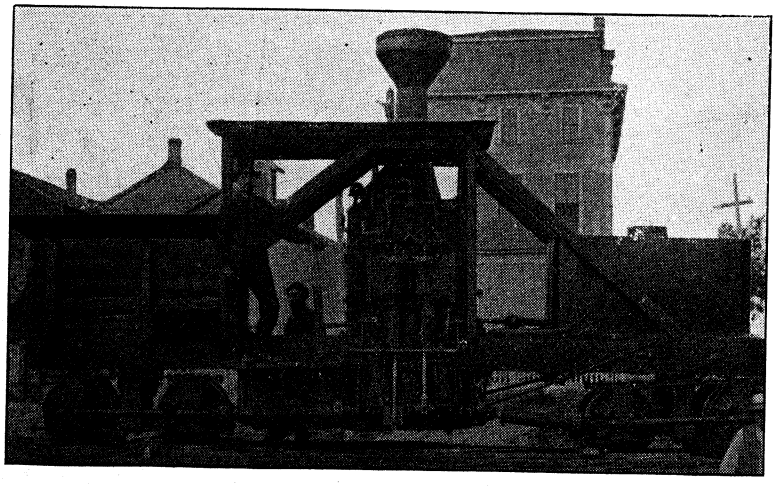
TRAIN OF TWELVE CARS AT END OF SWITCH BACK, 6 PER CENT GRADE, ON GREENBRIER AND ELK RAILROAD, PULLED BY FIFTY-TON SHAY LOCOMOTIVE.



BIRD'S EYE VIEW OF WEST SIDE LUMBER COMPANY'S PLANT, TOULUMNE, CALIFORNIA.



HETCH-HETCHY AND YOSEMITE VALLEY RY., 20 CAR TRAIN PULLED BY 60 TON SHAY LOCOMOTIVE, SHOWING BOTH ENDS ROUNDING LOOP, 4.8 PER CENT GRADE.

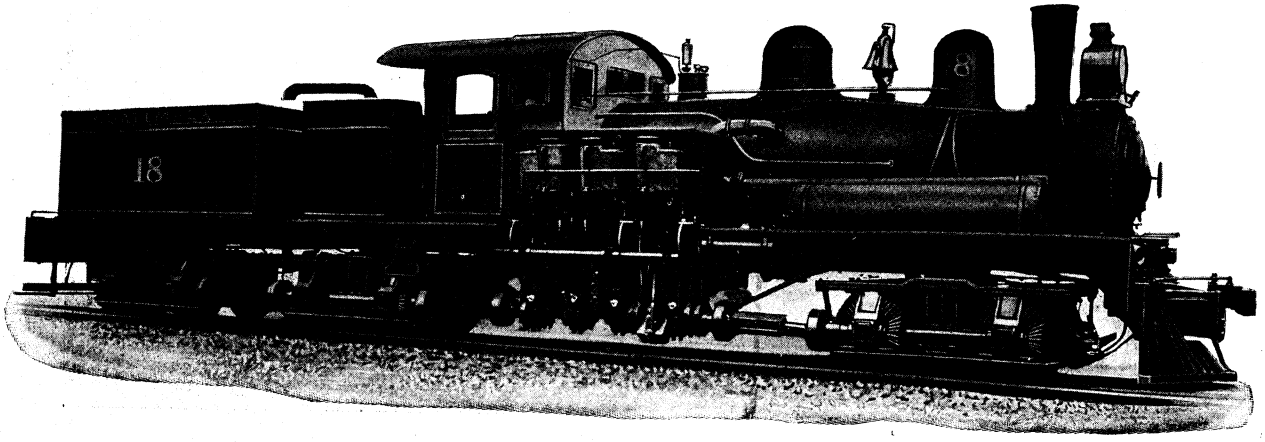


THE FIRST REAL LOGGING LOCOMOTIVE "SHAY PATENT GEARED."

the cost of production.

The band saw replaced the circular saw because of the great saving in kerf, increased capacity and accuracy which it afforded in turning out better quality of lumber. From the band saw has eminated the band resaw, which came into general use in America about twelve years ago. The resaw was for several years after its inception, an experiment, yet today it is very important adjunct to the saw mill plant.

In the following we give a brief resume of some of the largest lumber plants in the United States. These are models of saw mill construction, filled with the latest improved machinery and exbihitions of magnificent engineering talent, in the use of steam hydraulics and electricity. Nowhere in the world can be found so many well constructed saw mills as in the United States. Many of these large mills have started within the last five years, and a few of the ones which are in the *Yellow Pine Belt* of the South are: Great Southern Lumber Co., Bogalusa, La.; J. J. Newman Lumber Co., Hattiesburg, Miss.; Finkbine Lumber Co., Wiggins, Miss.; Alexander Gilmer Lumber Co., Remlig, Texas.; Eastman, Gardiner & Co., Laurel, Miss.; W. C. Wood Lumber Co., Collins, Miss.; Butterfield Lumber Co., Norfield, Miss.; Kirby Lumber Co., Houston, Texas; Frost, Johnson Lumber Co., Alden Bridge, La. and Long Bell Lumber Co., main office Kansas City, Missouri, with mills all through the South, some of the principal ones being, De Ridder, La., Yellow Pine, La., Lufkin, Texas, Boniami, Longville, La., Lake Charles, La. and Woodsworth, La. In the famous Spruce district of West Virginia, we find West Virginia Spruce Lumber Co., Cass, W. Va.; Cherry River Boom & Lumber Co., Richwood, W. Va.; Pardee & Curtin Lumber Co., Curtin, W. Va.; Laurel Manufacturing Co., Fenwick, W. Va.; Warn Lumber Co. Seibert, W. Va.; Parsons Pulp & Lumber Co., Horton, W. Va.; J. M. Bemis, Bemis, W. Va.; Flint, Erving & Stoner, Dunlevie, W. Va.; and Tioga Lumber Co., Tioga, W. Va. In other sections of the United States a few we might name are: Laquin Lumber Co., Laquin, Pa.; Babcock Lumber Co., Ashtola, Pa.; West Side Lumber Co., Tuolume, Cal.; A. J. Niemeyer Lumber Co., Little Rock, Ark; Potlatch Lumber Co., Potlatch, Idaho; Humbird Lumber Co., Sand Point, Idaho; Geo. Palmer



A MODERN LOGGING LOCOMOTIVE. "THE SHAY."

SAWMILL PLANT, CHERRY RIVER BOOM AND LUMBER CO., RICHWOOD, W. VA.

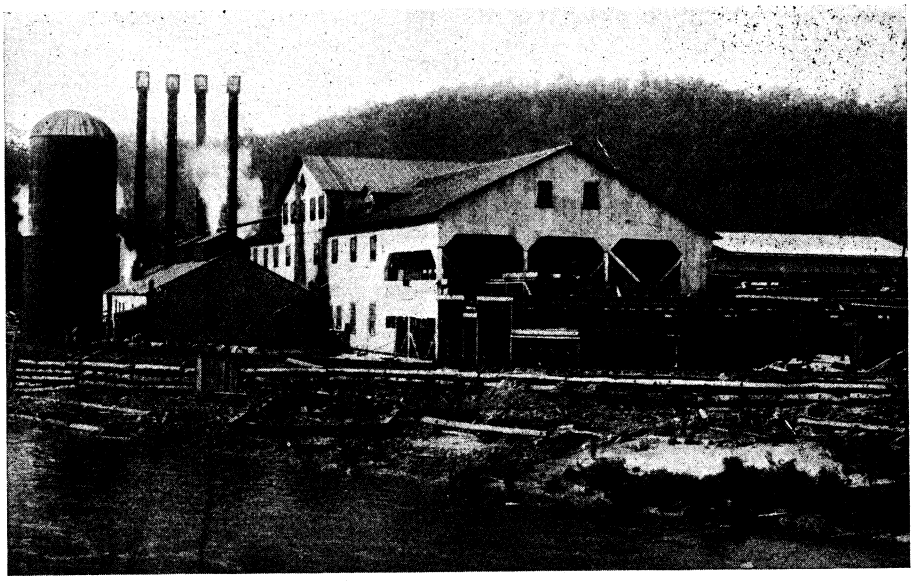
Lumber Cc.,La Grande, Ore.; Chapman Timber Co., Portland, Ore.;St. Paul & Tacoma Lumber Co.,Tacoma, Wash.; Blackwell Lumber Co., Couer de 'Alene, Idaho.

The largest lumbering proposition in the world we find to be that of the Great Southern Lumber Co. at Bogalusa, La. A visit to Bogalusa is worth the time and expense consumed of any lumberman, not only to see the great advance which is being made in modern saw mill construction, but to also see the modern conveniences and sanitary appliances in the town built and owned by the Great Southern Lumber Company. This plant was built at a cost of many hundreds of thousand dollars, and has a total capacity of 700,000 feet per day.

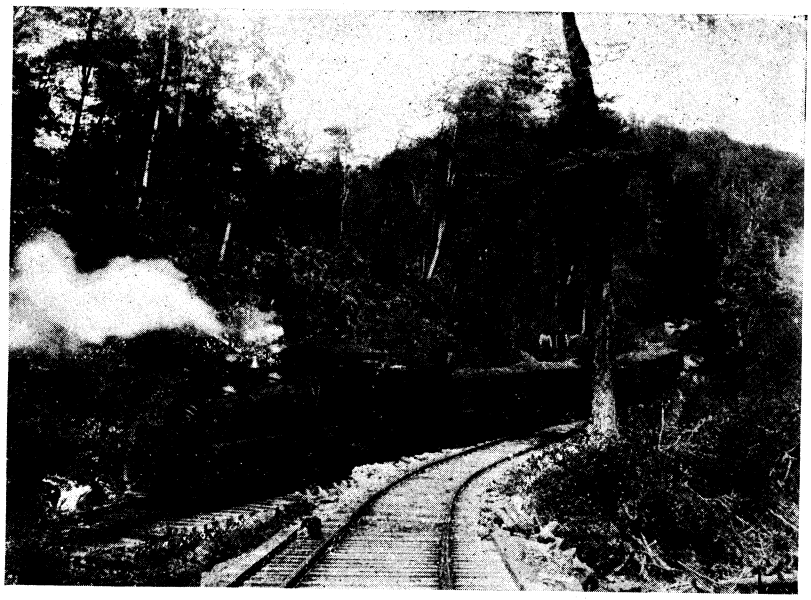
We think we can consistently say that in no other part of the United States has the progress in lumber manufacturing been more pronounced within the last few years, than in the Yellow Pine district in the Southern States. Besides the world renowned plant of the Great Southern Lumber Co., there are other plants in this district which we cannot pass without special mention. The plant of the Finkbine Lumber Co., Wiggins, Miss., is certainly a model plant; it has an average daily capacity of 150,000 feet per day, and in it you can see some of the most modern equipment.

The J. J. Newman Lumber Company's plants at Hattiesburg, Miss.,and Sumrall, Miss., deserve the highest praise. Both plants are modern in every respect and have a combined capacity of 360,000 feet per day.

The Eastman & Gardiner Co., at the little town of Laurel, Miss., one hundred and forty-six miles from New Orleans, have one of the most modern lumber manufac-



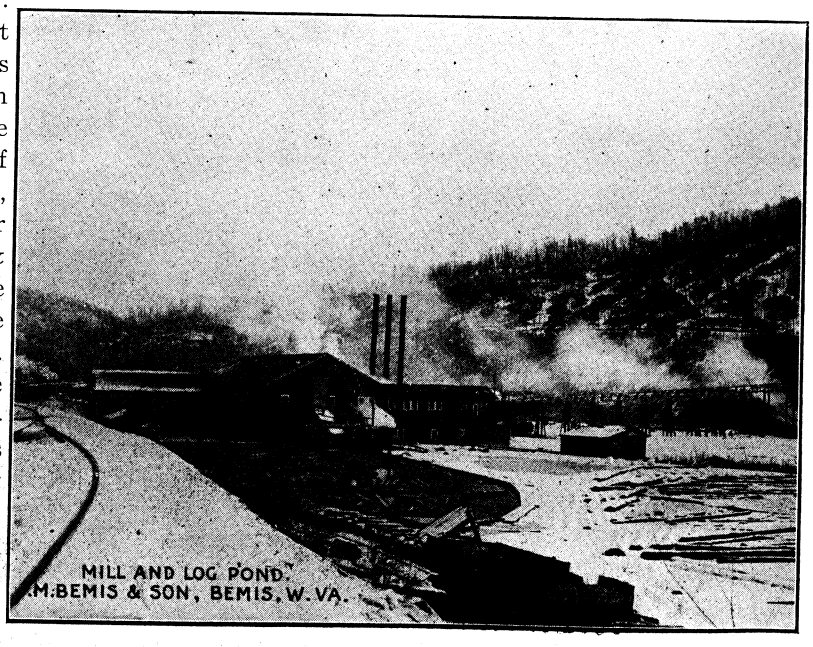
LOWER MILL, PARDEE AND CURTIN LUMBER COMPANY, CURTIN, W. VA.



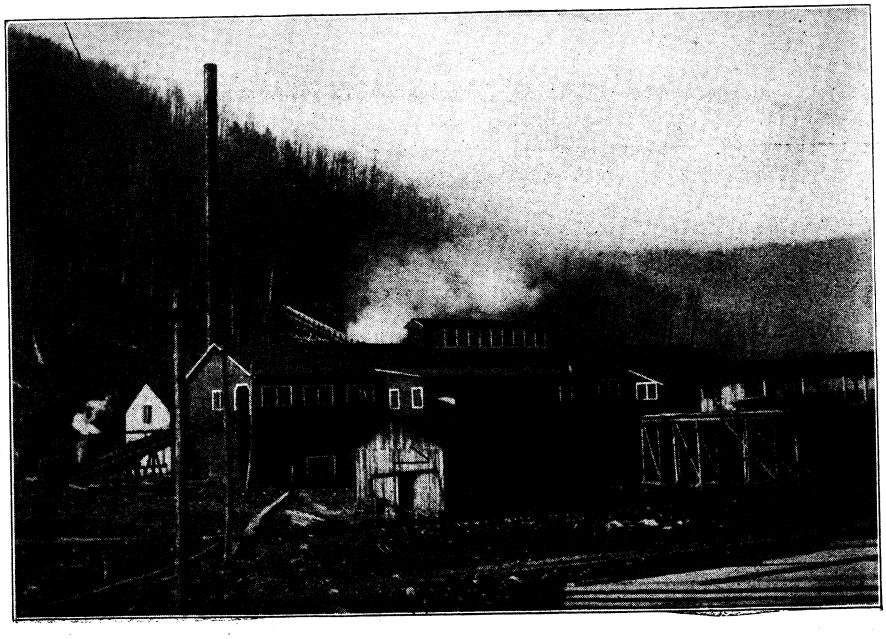
RAILROAD OF CHERRY RIVER BOOM AND LUMBER CO., 8 PER CENT GRADE.

turing plants in the South. This plant has an average daily capacity of 350,000 feet per day. The Company operates some thirty-five miles of railroad, and have most excellent railroad equipment. The Butterfield Lumber Co., of Norfield, Miss., have a thoroughly modern plant. This company was the first to operate a band mill in Mississippi, and also one of the first in the South. Their plant has a capacity of 130,000 feet per day; they operate in connection with their lumber company the Natchez-Columbia & Mobile Railroad. It is thirty-four miles in length and is operated under the standard code of train rules and by telephone system of train orders.

In the famous Spruce district if you want to come in contact with a good mill, you should not fail to visit the Parson Pulp & Lumber Co., Horton, W. Va. This company owns the town of Horton, and every modern convenience is accorded the people living there, such as good hotel accommodations, churches, schools, opera house, water works, electric lights, etc. The mill of the Parsons Pulp and Lumber Co. has a capacity of 100,000 ft. per day. They figure that the entire cut for 1910 will aggregate 30,000,000 feet. While you are making the rounds in the Spruce country, don't fail to call on the other concerns of which we heretofore made mention. J. M. Bemis & Son have an excellent plant at Bemis, W. Va. This is a busy mill. Then down in West Virginia there is a little town by the name of Cass, of about five hundred inhabitants, located on the Greenbrier branch of the Chesapeake & Ohio Railroad, and here we find the West Virginia Spruce & Lumber Company's plant. This is undoubtedly one of the best equipped plants in this section. Not so very far from Cass will be found the Flint, Erving & Stoner Lumber Co., at Dunlevie, W. Va. The operations of this company we can say are among the largest in the country



FIFTY TON SHAY LOCOMOTIVE WITH TRAIN LOAD OF LOGS ON 8 PER CENT GRADE.



MILL, LAUREL MFG., CO. FENWICK, W. VA.

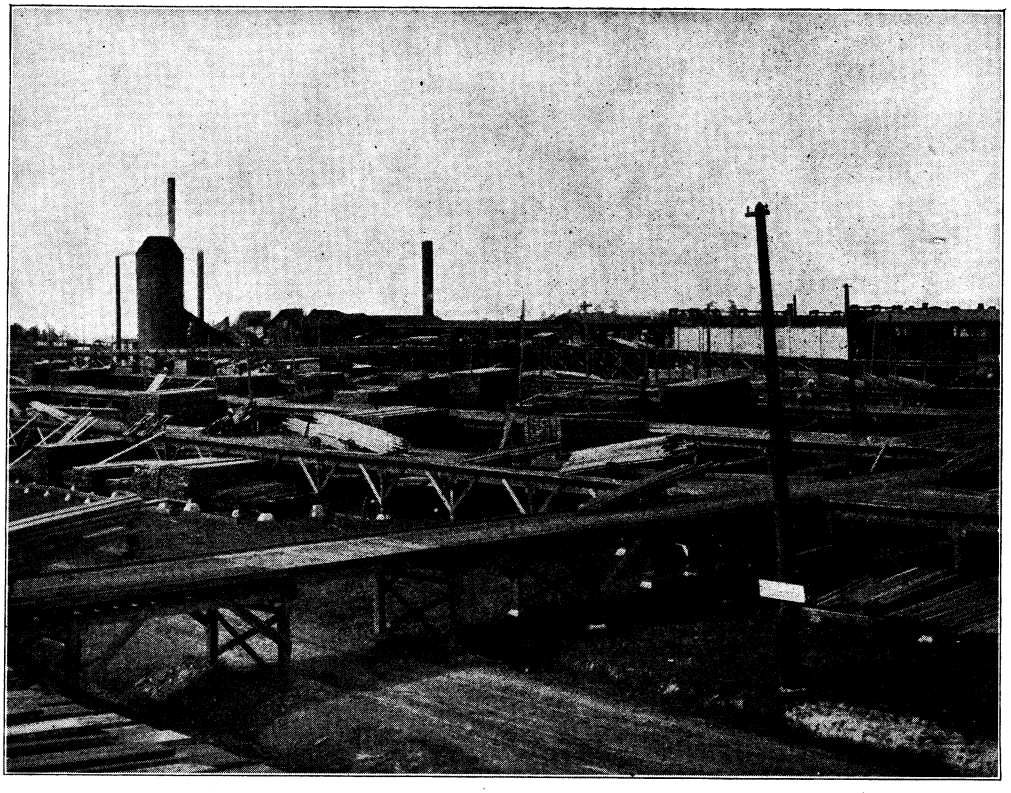
Leaving this section it would be unwise to not visit Nicholas County, and the companies operating southeast of Clarksburg, as there we will come across some interesting plants. Pardee & Curtin Lumber Co. have two plants located at Curtin, both filled with modern machinery. Tioga Lumber Co., Tioga W. Va., operates a 100,000 daily capacity mill, which is one of the best of its kind. Cherry River Boom & Lumber Co.,

of Richwood, W. Va., own and operate two large mills in Nicholas County. The Richwood plant operated by this company is perhaps one of the largest in the State of West Virginia. Coming up out of this district and drifting into Pennsylvania, we find the large timber holdings of the Babcock Brothers, operated by a company under the style of Babcock Lumber Co. This company's mills are located at Arrow, Pennsylvania, and Ashtola, Penn. The annual cut of these two mills, is sixty million feet. Both mills are equipped with up-to-date and modern machinery.

If you are on the Pacific Coast, it would be a good idea to take in some of the California sugar and white pine mills. An extensive producer is that of the West Side Lumber Co., Tuolume, Cal. The fact that the timber is not located close around Tuolume, it operates a railway known as Hetch-Hetchy Yosemite Valley Railway, which is some thirty-five miles in length. The saw mill owned by this company has a daily capacity of 160,000 feet and is equipped with all modern up-to-date machinery.

MCGIFFERT LOG LOADER AT WORK IN WOODS, J. M. BEMIS AND SON., BEMIS, W. VA.

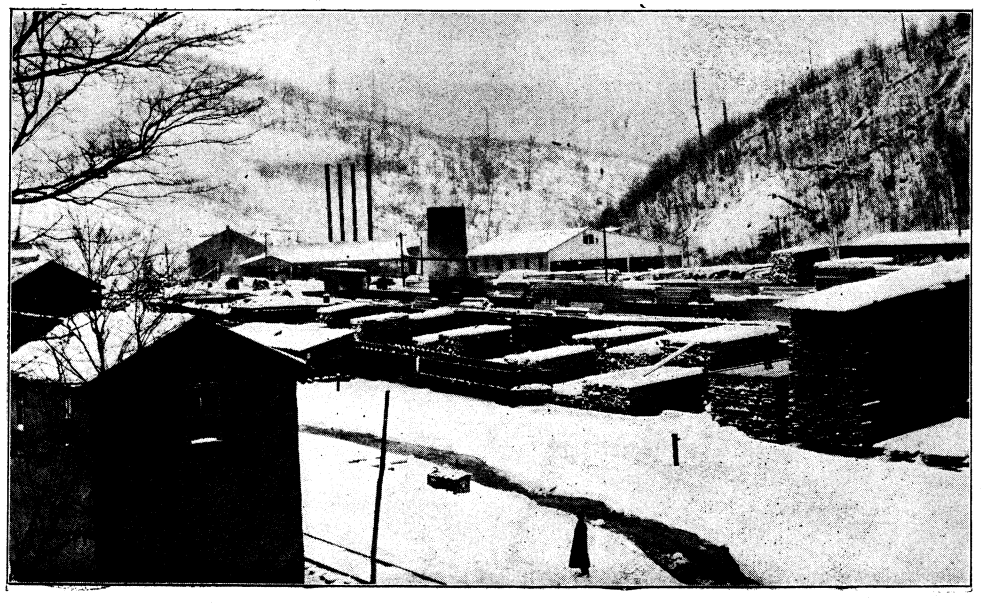
In the State of Washington, the St. Paul & Tacoma Lumber Co., of Tacoma, Wash., is one which should not be missed, and then when you get over into the Inland Empire, a name which is given to the country within a radius of two hundred miles of Spokane, there is the Blackwell Lumber Co., successors to the B. R. Lewis Lumber Co., Couer de 'Alene, Idaho. The plant operated by this company has an annual capacity of



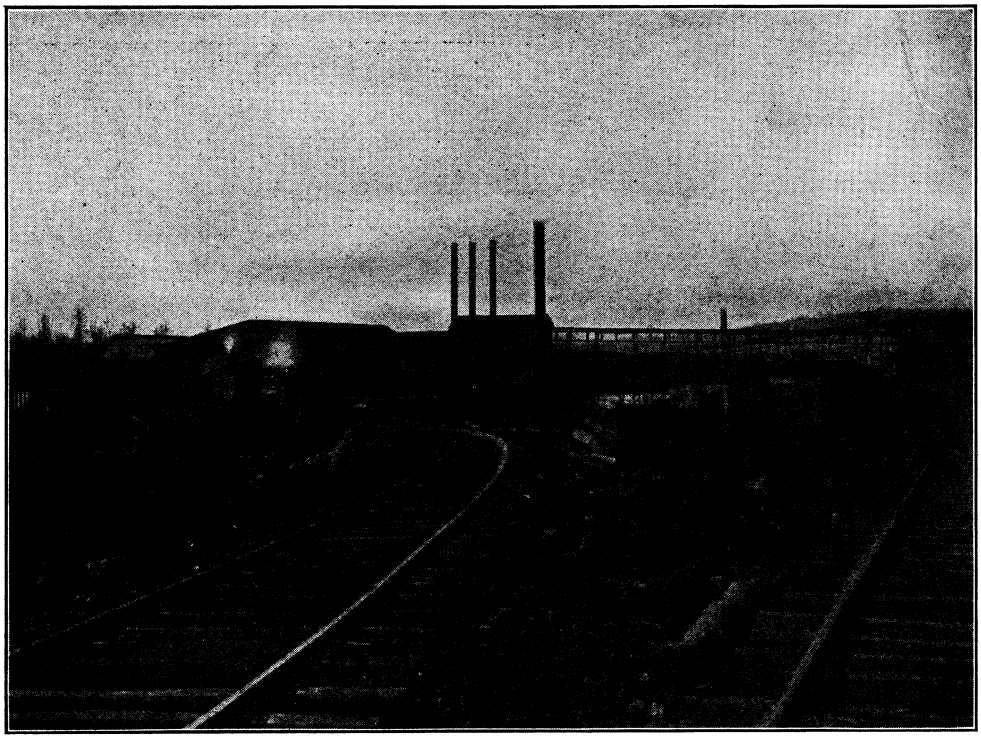
PARSON'S PULP AND LUMBER CO'S. MILL AND LUMBER YARD AT HORTON, W. VA.

100,000 feet.

We have given a few illustrations of logging equipment used in the different sections as well as the saw mill plants, and comparing the methods now employed with those in vogue a

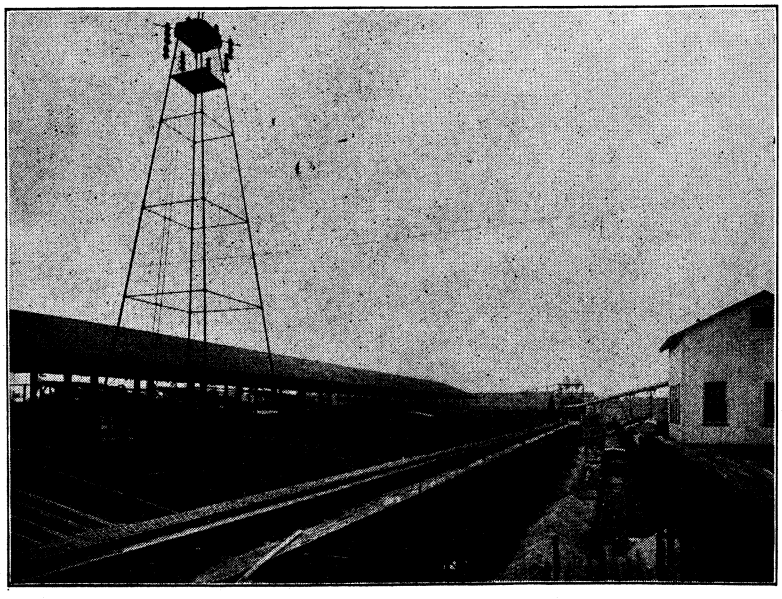


VIEW OF EASTMAN, GARDINER AND COMPANY'S PLANT, SHOWING SORTING PLATFORMS.

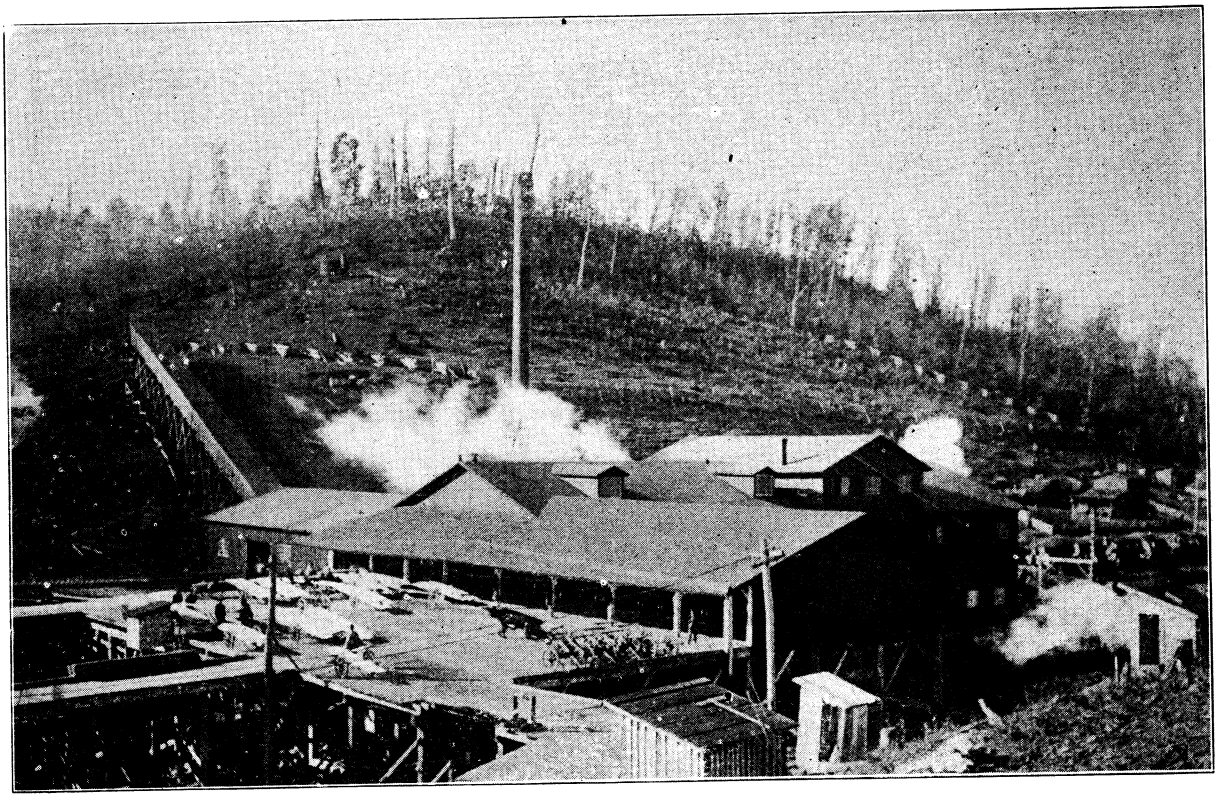


MILL, BABCOCK LUMBER COMPANY, AT ARROW, PA.

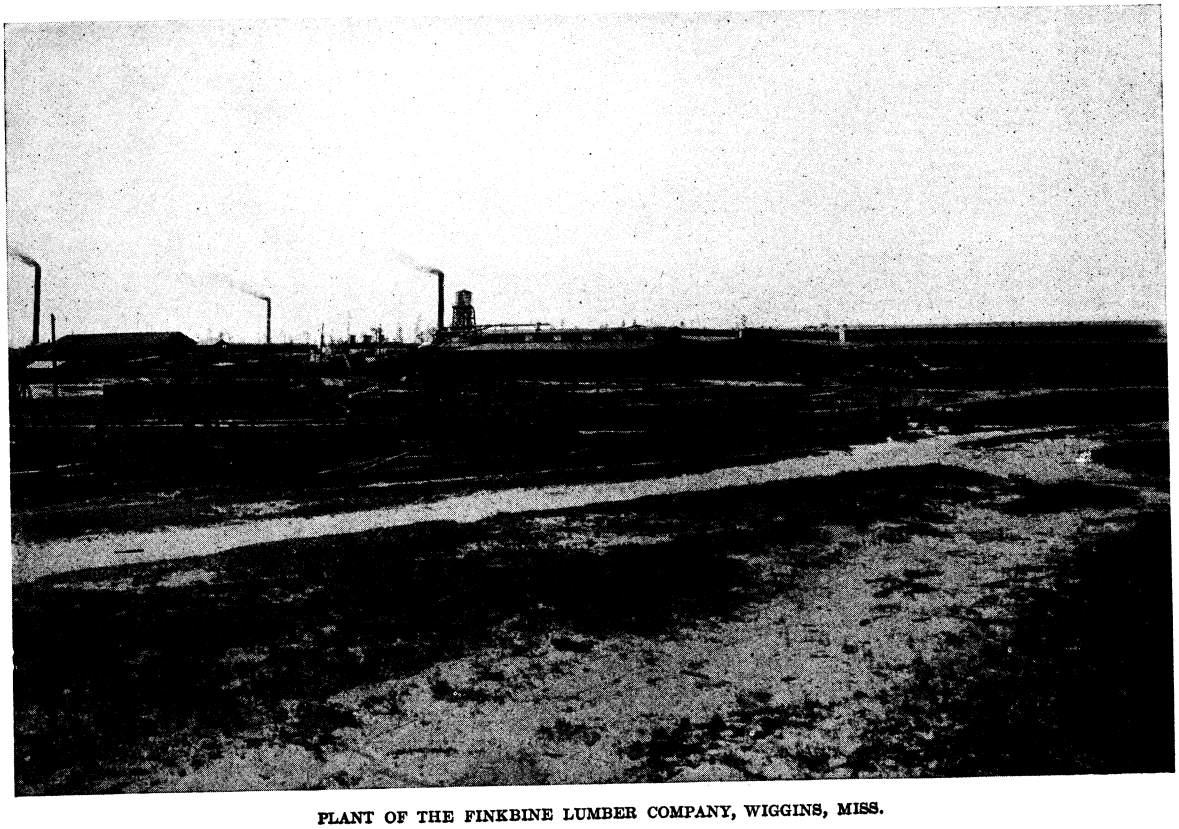
number of years ago, one can see that there has been a great evolution in the manufacture of lumber, the handling of the logs from the woods, etc. However, considering what has taken place in the past, we may look for a greater improvement in the next thirty years to come as the American people are not content to let well enough alone, but are always working for something better.



THE 8-SECTION SOULE AUTOMATIC STACKER AND LUMBER SORTER, GREAT SOUTHERN LUMBER COMPANY.



NORTH END VIEW OF MILL, TOIGA LUMBER COMPANY.



PLANT OF THE FINKBINE LUMBER COMPANY, WIGGINS, MISS.

CONDITION OF CROPS.

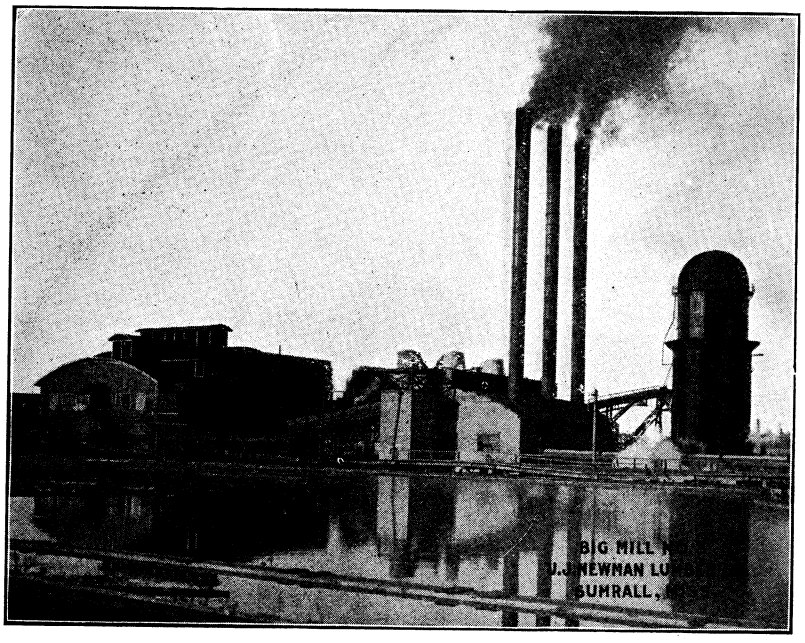
Washington ,D. C., August 8.—The average condition of the corn crop on August 1, as estimated by the Crop Reporting Board of the Department. of Agriculture made public at 2:30 p. m., with the general monthly crop report to-day, was 79..3, as compared with 85..4 last month, 84..4 a year ago, and 82..1, the average on August 1 for the last ten years.

Preliminary returns indicate a winter wheat yield of about 15..8 bushels an acre, or a total of about 458,294,000 as compared with 15..8 and 446,366,000 bushels respectively as finally estimated last year.

The average quality of the crop is 92..6 against 90..3 last year.

The average condition of spring wheat on August 1 was 61 per cent, as compared with 61..6 last month, 91.6 last year, and 81..9 the ten year average on that date.

The average condition of the oat crop on August 1 was 81..5, as compared with 82..2 last month, 85..5 a year ago, 76..8 in 1908, and 82..6 the ten-year average on that date.



The average condition of tobacco on August 1 was 78..5, as compared with 85..3 last month, 83.4 a year ago, 65..8 in 1908, and 82..2 the ten-year average on that date.

The condition in important tobacco states was:

Kentucky 77, North Carolina 74, Virginia 85, Ohio 80, Pennsylvania 86, Tennessee 86, Wisconsin 60, South Carolina 73, Connecticut 85, and Florida 82.

BEFORE AND AFTER.

Prosperous publisher—Do you write before or after eating?

Poet (faintly)—Always before unless, I have something to eat.—Judge.

THE DRUMMER'S DREAM.

A little room in a little hotel,
In a little country town,
On a little bed with a musty smell,
A man was lying down.

A great big man with a great bid snore—
And he lay on his back, you see—
And a peaceful look on his face he wore,
For sound asleep was he.

In his dream what marvelous trips he made,
What tremendous bills he sold!
And nobody failed and every one paid,
And his orders were as good as gold.

He smiled and smothered a scornful laugh
When his fellow-drummer blowed;
For he knew that no other had sold the half
Of what his order book showed.

He got this letter from home one day:
"Dear Sir: We've no fitter term
To use in your case than simply to say
Henceforth you are one of the firm."

And a glorious change this made in his life;
He now from the road withdrew;
And really soon got to know his wife,
His son and his daughter, too.

And then he moved from his obscure flat
To a house on the avenue;
Lievd swell, was happy, got healthy and fat,
Respected and wealthy ,too.

But with a thump, bang! whang! thump again,
The LandLord stood at the door,
"It's purty nigh time for that 6:10 train!"
And the Drummer's dream was o'er.

CHANGE IN LOCATION.

The Jeffrey Manufacturing Company, Main Office and Works, Columbus, Ohio, are changing the location of their Denver Office from No. 1711 Tremont Place, and after August 1st will occupy a commudious suite of rooms in the First National Bank Building.

This Company besides maintaining a large selling force in over a dozen of the leading cities of this country, also maintain a corps of engineers at their branch offices situated in the following cities: Chicago, St. Louis, Denver, Montreal, Pittsburg, Charleston, W. Va., Boston, New York, and Birmingham.

There are also nearly 100 Jeffrey Agencies in additional cities in this country and abroad.

INDEX TO ADVERTISERS AND WHAT THEY HAVE TO SELL.

Directory of Railway, Locomotive, Engineering and Mining Journals

THE LOCOMOTIVE WORLD

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LIMA, OHIO

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Name.....

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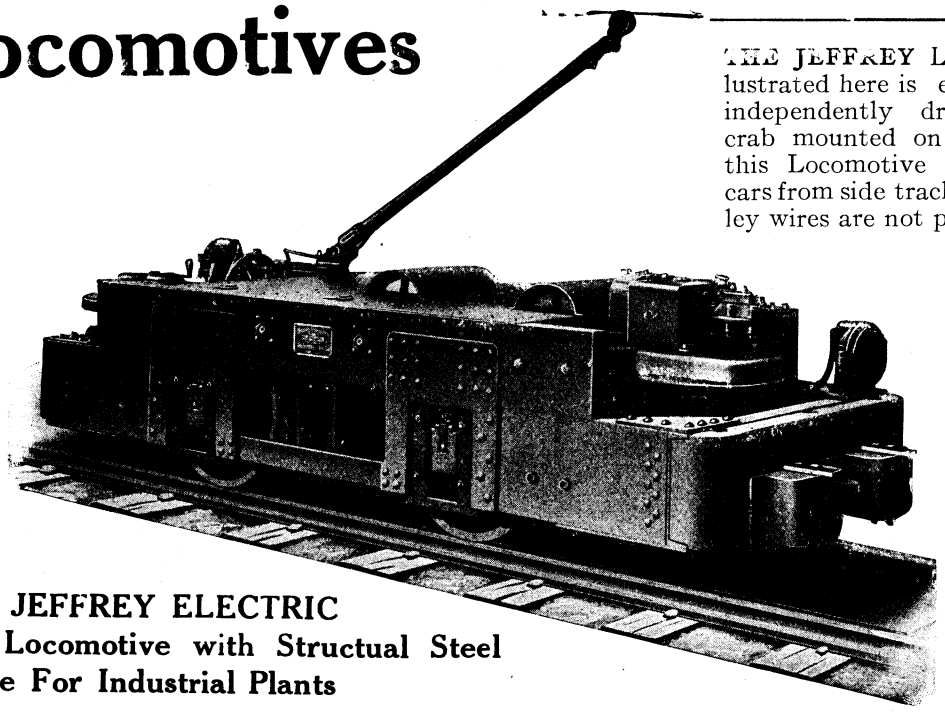
Hauling With Electric Locomotives

THE JEFFREY Locomotive Illustrated here is equipped with independently driven electric crab mounted on front end of this Locomotive for gathering cars from side tracks where trolley wires are not permissible.



Crab device is equippedwith drum holding 350 feet of ⅜ inch flexible steel rope.

7-ton JEFFREY ELECTRIC Crab Locomotive with Structual Steel Frame For Industrial Plants

Every detail is considered and all materials are selected after a thorough testing and careful inspection and the latest models represent the most practical Industrial Locomotives on the market.

We court the most searching investigation, in fact, we solicit an opportunity to demonstrate the value of our Locomotives.

Write To-day for Our Illustrated books "Care of Electric Mine Locomotives in Service" 12Eb and the Jeffrey Catalog "17Eb".

The Jeffrey Mfg. Co., Columbus, Ohio

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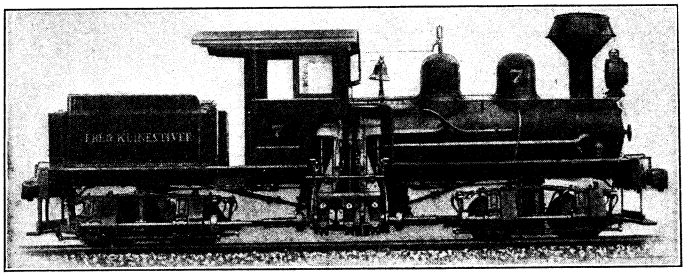
Just say you saw this ad in the Locomotive World.

FOR SALE

Brand new 13-ton Shay, having two 6x10 cylinders, 27½" straight top boiler; 36" gauge; straight stack. Used only on two trips, and found to be too small for work required. A bargain for some one requiring a small locomotive. Reference No. 093. Lima delivery



We also have the following second-hand Locomotives for sale CHEAP

	TONAGE	TYPE	GAUGE	LOCATION	REFERENCE NO.
1	13	Shay	56½"	Georgia	0829
1	13	Shay	36 "	Alabama	093
1	15	Shay	42 "	Mississippi	0810
1	15	Shay	56½"	South Carolina	0818
1	17	Shay	56½"	South Carolina	0819
1	18	Shay	36 "	Tennessee	086
1	28	Shay	56½"	Arkansas	0828
1	33	Shay	56½"	West Virginia	0825
1	33	Shay	56½"	Michigan	0827
1	37	Shay	56½"	Michigan	0826
1	55	Shay	56½"	New Mexico	0832
1	65	Shay	56½"	New Mexico	083
1	65	Shay	56½"	New Mexico	0831
1	30	4 Wheel	56½"	Mississippi	0833
1	30	Mogul	56½"	Mississippi	0823
1	30	Mogul	56½"	Mississippi	0824
1	35	Mogul	56½"	Mississippi	089
1	38	Mogul	56½"	Arkansas	0817

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THE LIMA EQUIPMENT COMPANY

LIMA, OHIO

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